

**OLEFIN OXIDE CATALYSTS**

5    **ABSTRACT**

          The invention provides a process for the oxidation  
of olefins having three or more carbon atoms in which the  
olefin is reacted with oxygen in the presence of a  
catalyst containing silver and a promoter containing  
10   potassium and a promoter containing rhenium deposited on  
an  $\alpha$ -alumina carrier, in which the potassium promoter  
provides potassium at a concentration of up to 120  $\mu$ mole  
per gram of catalyst. The invention further provides a  
catalyst composition for the oxidation of olefins having  
15   three or more carbon atoms in which the catalyst contains  
silver and a promoter containing potassium and a promoter  
containing rhenium deposited on an  $\alpha$ -alumina carrier, in  
which the potassium promoter provides potassium at a  
concentration of from 8  $\mu$ mole per gram to 120  $\mu$ mole per  
20   gram of catalyst.